



Master Road and Addressing Project Guide

Information Technology Department



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Website



Online Maps

I. The Project

Format/quality of address and road name information varied considerably across different Augusta, Georgia systems and databases. It was nearly impossible to identify all of the activity, such as building permits or police reports, associated with a given address and/or road. The various departments recognized the need for consistent processes and standards that needed to be followed by a sole, dedicated authority. The GIS Division of the Augusta Information Technology Department along with the assistance of the Planning & Development Department is now ensuring that as data reaches the varying departments, correct and consistent information is being delivered. To do so, the division initiated a countywide project for the Master Road and Addressing Database (MRAD) that would:



- A) establish standards and processes
- B) build a spatial database that would become the central location of road names and addresses
- C) identify and correct all current issues that could affect emergency response
- D) facilitate the new standards to any external agencies and/or vendors
- E) continue to promote public health, safety, convenience, and general welfare to present and future inhabitants of Augusta GA with quality data

The GIS Division reviewed federal and local standards from various agencies for roads and addresses. Some of those agencies referenced included the National Emergency Number Association (NENA), the Georgia Spatial Infrastructure Committee, the United States Postal Service (USPS) and others. But for such a project to be a success with adopted standards, critical components of the spatial database (Master Road and Addressing Database (MRAD) had to be built.

II. Components of the MRAD

The Master Road and Addressing Database (MRAD) is the sole source of all approved and verified road names and addresses in Augusta Richmond County. The MRAD is composed of 3 critical parts:

- A) Master Address Repository (MAR)
The MAR is a database of addresses for various types of structures throughout Augusta, GA. Not only does the MAR include situs (parcel) addresses but also buildings, intersections, utility assets and other identifiers. Each address in the MAR is assigned unique site address identification (SITEADDID). The SITEADDID is a text field that is formatted as "SID-####". For all systems that use addresses, the SITEADDID is the critical field that will allow information to be updated and passed correctly from the MAR to other databases.

Other Site Subtype	Parcel
Site Address ID	SID-28154
Address Number Prefix	2803
Address Number Suffix	
Full Address Number	2803
Road Directional Prefix	
Road Name	Vernon
Road Type	Drive
Road Directional Suffix	
Full Road Name	Vernon Dr
Address Unit Type	
Address Unit Number	
Full Site Address	2803 Vernon Dr
Alternate Full Address	
CITY	Augusta
State	Georgia
Zip	30906
Zip+4	
City, St, Zip	Augusta, GA 30906

B) Master Road Name Table (MRNT)

The MRNT is the table of all approved and pending road names in Augusta, GA. The table parses out all road names to easily designate directions (pre or post) and road types. This table will also include alias road names, the location, subdivision, and any other useful information. The table should be used for any system that uses road data for name validation.

PreDirection	RoadName	RoadType	PostDirection	FullName	AltName	StateAlt	MemorialAlt	NumericAlt
W	Terrace	Ct		W Terrace Ct				
N	Whitechurch	Ct		N Whitechurch Ct				
E	Chapman	St		E Chapman St				
S	Fieldcrest	Dr		S Fieldcrest Dr				
	Shinnecock Hills	Ln		Shinnecock Hills Ln				
	Quail	Ct	W	Quail Ct W				
	Gaines	Ct	S	Gaines Ct S				
	Gaines	Ct	N	Gaines Ct N				
	Bermuda	Cir	E	Bermuda Cir				
	Interstate 20			Interstate 20	Carl Sanders Hwy	I-20		
	Bobby Jones	Expy		Bobby Jones Expy		GA Hwy 232/I-520		
	Eleventh	St		Eleventh St				11th St
	Sixth	Ave		Sixth Ave				6th Ave

C) Master Road Centerline File (MRCF)

The MRCF is the spatial data layer that represents all the road centerlines in Augusta, GA. The main features associated with each segment are derived from the MRNT. Each centerline in the MRCF is assigned a unique identification (CENTERLINEID). The CENTERLINEID is a text field that is formatted as “RD-####”. For all systems that have assets/infrastructure, the CENTERLINEID is the critical field that will allow information to be updated and passed correctly from the MRCF to other databases. Additional attributes are also contained in the MRCF that enhance address matching/geocoding and vehicle routing.

Shape *	Centerline ID	Left From Address	Left To Address	Right From Address	Right To Address	Full Road Name
Polyline	RD-3732	4608	4620	4603	4619	Clearwater Ln
Polyline	RD-3733	4604	4652	4627	4651	Haviland Ct
Polyline	RD-3734	4516	4544	4515	4547	Clearwater Ln
Polyline	RD-3735	4740	4760	4739	4759	Clearwater Ln
Polyline	RD-3736	10803	10859	0	0	Royal Porthcawl Dr
Polyline	RD-3737	4772	4772	4763	4783	Clearwater Ln
Polyline	RD-3738	4804	4820	4803	4815	Clearwater Ln

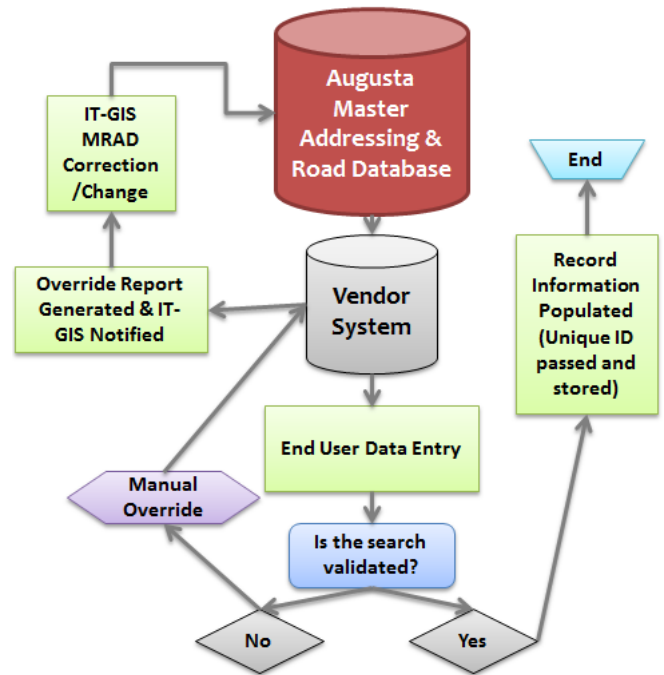


III. Integrating the MRAD and the Unique Identifiers

Vendor systems and/or solutions that use addresses or road names must incorporate the components of Augusta's MRAD to maintain consistency and accuracy across the agency. The systems must use a web service or other real-time means of establishing an interface with MRAD. The interface will be the means of validating and updating all road names and/or addresses.

A) Validation

Any system and/or solution that requires data entry of addresses and/or road names must query the MRAD. The end user should either be allowed to select the correct address/road name or the field would auto-populate with data from the services. If a particular value is not found upon querying the service, the software/solution must have the ability to offer an administrative override function. Any road name and/or address that is given an administrative override must be reported to IT-GIS for further assessment. These reports should either be generated weekly or monthly and reference the associated record.



B) System Updates

Vendor systems must accommodate an additional text field that would be used for Augusta's unique identifiers (SITEADDID and/or CENTERLINEID). If a record is properly validated through the MRAD, the system/solution must also associate the unique identifier in the additional field. Because addresses and road names are subject to change, the unique identifier will serve as the link between MRAD and any integrated systems. Vendor systems/solutions should update all addresses and road names daily to ensure the most update information is available for the end user. Each component of the MRAD has a field that tracks the last edit date.

